

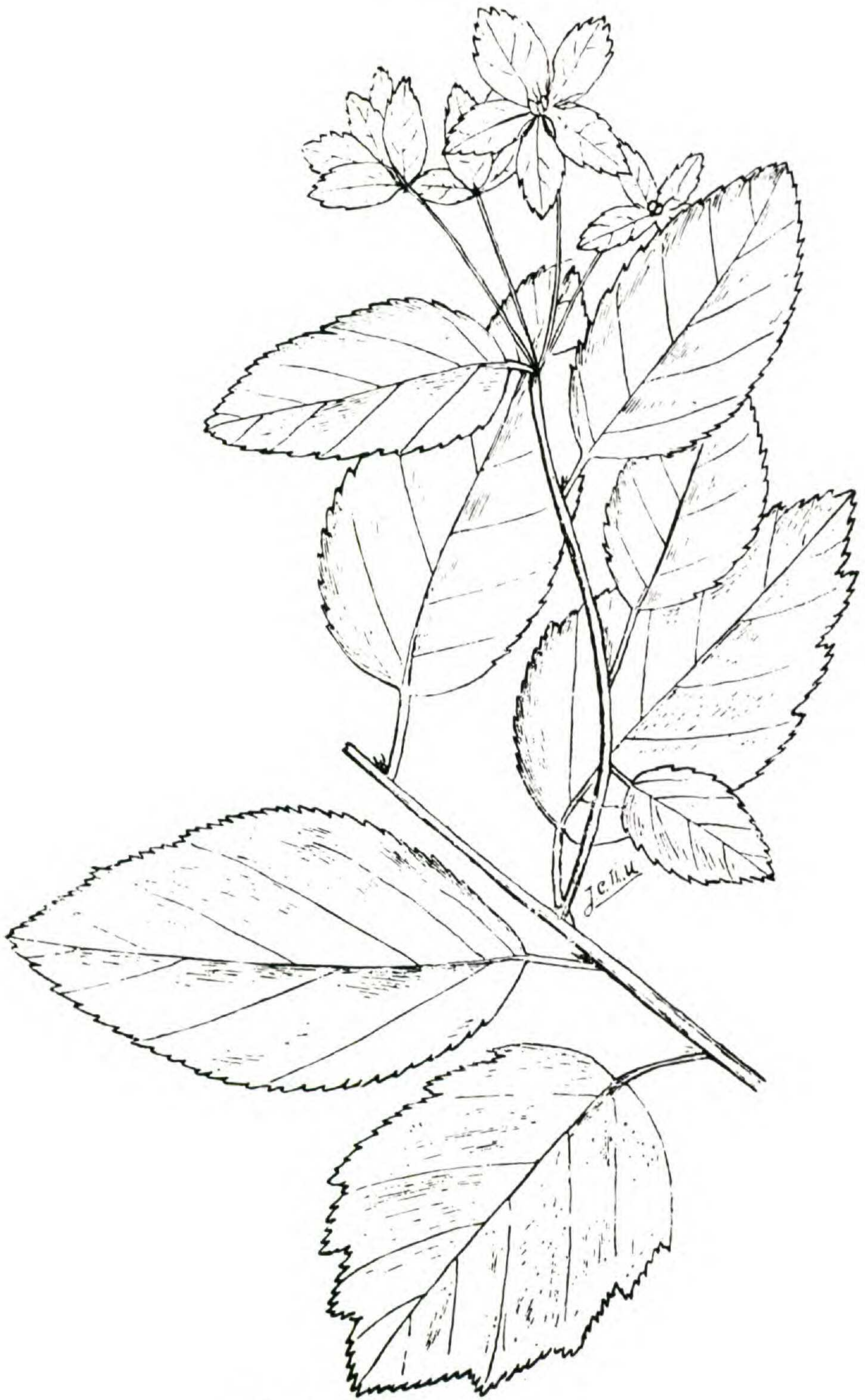
NEVIUSIA ALABAMENSIS IN ARKANSAS

DWIGHT MUNSON MOORE

IN late April, 1955, the writer's attention was called to some strange shrubs growing on a low sandstone ridge about six air-miles northwest of Conway, Arkansas, in the southeastern corner of Conway County, next adjacent to Faulkner County in which Conway lies. These were growing in some quantity along the sandstone ridge, extending some two hundred yards. Specimens of the plant were collected and, although past their blooming period, were easily identified as *Neviusia alabamensis* Gray. Search in the University of Arkansas Herbarium revealed four other sheets collected in 1925 by D. Demaree along the cliffs of Cove Creek, in the northern part of Faulkner County, and identified then as *Physocarpus*. These also proved to be *Neviusia alabamensis* Gray.

For nearly one hundred years, *Neviusia alabamensis*, a monotypic species of Rosaceae, has been generally considered a very definite endemic in the state of Alabama. It had been found in 1857 by Drs. R. D. Nevius and W. S. Wyman along the cliffs of Black Warrior River a few miles from Tuscaloosa, Alabama. It was sent to Dr. Asa Gray who described it (1858) as a new genus and species, naming it for one of the discoverers, Dr. Nevius. Within the next fifty years other stations for this same shrub were found in three other counties of northern Alabama, but it was still considered a very limited endemic for that state. It has thus been referred to by Chapman (1884), Mohr (1901), Harper (1906), Small (1913, 1933), Rydberg (1918), and Bailey (1935).

In 1918, Dr. J. C. Th. Uphof, while making an extended ecological study in southern Missouri, found a single specimen of this shrub about eight miles west of Poplar Bluff, Missouri. He reported this in 1921 in a German publication, and in 1922, while writing up the ecology of southeastern Missouri, mentioned finding this plant. Unfortunately, his specimens were destroyed before he got them back to U. S. herbaria from Holland, and little attention was paid to his find. As Dr. Uphof said, it was apparently an adventive, probably having been started from seed dropped by birds from Alabama or some



Neviusia alabamensis Gray.

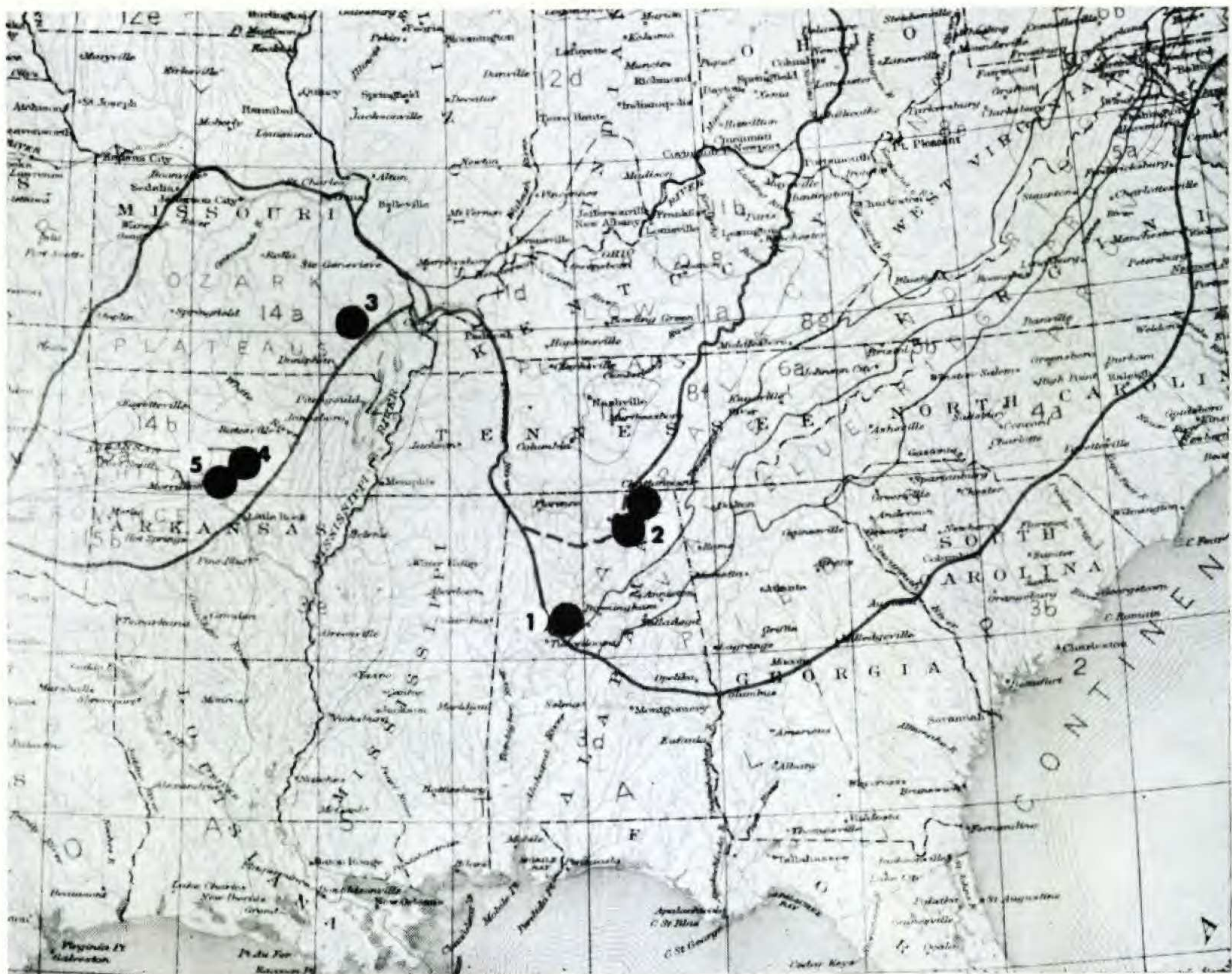


FIG. 1. Map of southeastern United States showing location of collections of *Neviusia alabamensis* Gray at 1. Tuscaloosa (1857) (type locality); 2. other northern Alabama counties; 3. Poplar Bluff, Mo. (1918) 4. Cove Creek, Ark. (1925); Conway Co., Ark. (1955). Continuous line indicates margin of Coastal Plain.

hitherto unknown location in Tennessee. However, Harper (1928), in his *Catalogue of the Trees, Shrubs, and Vines of Alabama*, acknowledged the new discovery and mentioned it as the only place outside of Alabama where this plant had been found growing wild. In 1931 Fernald called attention to the relationship of this unique plant to its nearest relative, *Kerria*, in eastern Asia, and Bailey (1935) refers to it as very limited in Alabama. Palmer and Steyermark (1935) apparently did not consider the report of this one specimen sufficient for including it in their *Catalogue of the Flowering Plants of Missouri*, or they doubted Uphof's identification. Comparison of Uphof's drawing, here reproduced, with Gray's original drawing (1858) seems to leave no doubt as to his accuracy. Even as late as 1944, Cain refers to *Neviusia* as an example of extreme local endemism, showing it on a map as located only at Tuscaloosa.

With two Arkansas stations for this unusual plant, it seemed

logical to pursue further the reported find in southeastern Missouri. Search in July, 1955, in the region indicated west of Poplar Bluff, failed to reveal any evidence of the plant. However, this is not surprising, when consideration is given to all the changes of roads, fields, and other marks of 'civilization.' Furthermore, it may still be possible to find this or more plants of the same kind if it is sought in the spring when it would be in flower.

This now seems to make a very definite picture. By placing these locations on a map (fig. 1) showing the Mississippi embayment of the old Gulf Coastal Plain, it may be seen that the original find lay on the eastern side of the embayment, while the one from Missouri and the two from Arkansas are on the northwestern side of this embayment. In Alabama they are reported on sandstone, shale, and limestone. In Missouri it was reported on sandy loam, while in Arkansas the finds were both on sandstone outcrops. In all cases they appear to be on carboniferous or subcarboniferous formations. Geological evidence points to the fact that this particular area has been exposed above the encroachments of the sea since the late Paleozoic or early Mesozoic. This might lead us to believe that *Neviusia alabamensis* would be classified as an epibiotic, a relatively old relic species, according to Cain (1944), rather than a strict endemic which he would consider to be a relatively youthful species. At least, *Neviusia alabamensis* may no longer be considered to be strictly an Alabama endemic, but like a few other species it must be shared with other similarly located states.

Credit should be given to Mr. Marvin Lawson of Conway who had seen these plants there and recognized them as something unusual and who called them to the attention of the writer. Thanks are also extended to Dr. Hugh Iltis for his encouragement in the pursuit of this unusual find, and to Drs. Uphof and Harper who have aided in the location of some old records which have helped materially in getting this more nearly complete picture of *Neviusia alabamensis*. At Poplar Bluff, Mo., Mr. Frank Hearne was very coöperative in the attempt to relocate Uphof's station.—UNIVERSITY OF ARKANSAS, FAYETTEVILLE, ARKANSAS.

BIBLIOGRAPHY

- BAILEY, L. H. 1935. Standard Cyclopedia of Horticulture. (Illustr.)
- CAIN, STANLEY A. 1944. Foundations of Plant Geography. Harper & Bros. (Map)
- CHAPMAN, A. W. 1884. Flora of the Southern United States. 2nd Ed. p. 121.
- FERNALD, M. L. 1931. Specific Segregations and Identities in some floras of Eastern North America and the Old World. *RHODORA*, **33**: 29 (Map 3).
- GRAY, Asa. 1858. *Neviusia*, a new genus of Rosaceae.—Mem. Am. Acad. Arts & Sci., II. **6**: 373–376, pl. 30.
- HARPER, R. M. 1906. Notes on the distribution of some Alabama Plants. Bull. Tor. Bot. Club, **33**: 532.
- . 1928. Catalogue of the Trees, Shrubs & Vines of Alabama. Monogr. 9. Geol. Surv. of Ala. p. 194–196. (Illustr.)
- MOHR, CHARLES 1901. Plant Life of Alabama. Vol. VI: Contr. U. S. Nat. Herb. U. S. D. A. (Illustr.)
- PALMER, E. J. and J. A. STEYERMARK 1935. Annotated Catalogue of the Flowering Plants of Missouri. Ann. Mo. Bot. Gard., **22**: 375–758.
- RYDBERG, PER AXEL 1918. North American Flora. **22**: 481.
- SMALL, J. K. 1913. Flora of Southeastern U. S., p. 524.
- . 1933. Manual of the Southeastern Flora, p. 625. (Illustr.)
- UPHOF, J. C. TH. 1921. Das Vorkommen von *Neviusia alabamensis* Gray im Suden von Missouri. Mitteilungen der Deutschen Dendrologischen Gesellschaft. p. 282–3. (Illustr.)
- . 1922. Ecological relations of plants in southeastern Missouri. Amer. Jour. Bot. **9**: 7.

HUMBOLDT AND AMERICAN BOTANY.¹—“Alexander, that is a beautiful name. I seem to recall an earth-conqueror by that name. Do you wish to be a conqueror?” “Yes, Sire,—but with my head.” So replied Alexander von Humboldt, aged eight, to King Frederick the Great. At the end of a long life there arrived in Berlin in 1857 an American, Bayard Taylor. He remarked, “I came to Berlin not to visit its museums, and galleries, its operas, its theatres, not to mingle in the gay life—but for the sake of seeing and speaking with the world’s greatest living man—Alexander von Humboldt.”

For Humboldt had seen both Bogotá and Baltimore, had conversed with Indian tribes and that student of Indian vo-

¹ HUMBOLDT. THE LIFE AND TIMES OF ALEXANDER VON HUMBOLDT, 1769–1859. Helmut de Terra. Alfred A. Knopf, N. Y. i-xvi, 1-386, i-ix. 8 plates, 3 maps. 1955.